

### REMARKS

In the Final Office Action mailed 03 April 2009, the Examiner reviewed claims 1-16. The Examiner has rejected claims 1-8 and 10-15 under 35 U.S.C. §102(b); has rejected claims 1, 11-15 under 35 U.S.C. §102(b); and has rejected claims 9 and 16 under 35 U.S.C. §103(a).

Applicant has amended claims 1, 3, 5, 6 and 11. After entry of this Amendment, claims 1-16 will be pending in this case.

Support for the amendments to claim 1 can be found in figures 5 and 8. Support for the amendments to claims 3, 5 and 11 can be found at paragraphs 48 and 56.

#### Rejection of Claims 1-8 and 10-15 under 35 U.S.C. §102(b)

The Examiner has rejected claims 1-8 and 10-15 under 35 U.S.C. §102(b) as being anticipated by Limon (6,273,910).

#### Rejection of Claims 1, 11-15 under 35 U.S.C. §102(b)

The Examiner has rejected claims 1, 11-15 under 35 U.S.C. §102(b) as being anticipated by Knudson (6,699,275) (The Examiner used patent no. US 6,273,910).

#### Rejection of Claims 9 and 16 under 35 U.S.C. §103(a)

The Examiner has rejected claims 9 and 16 under 35 U.S.C. §103(a) as being unpatentable over Knudson (6,699,275) (The Examiner used patent no. US 6,273,910) in view of Falotico et al. (US 7,303,758 B2).

#### The Cited Art

The **Limon** patent states that "for the stent to remain in place on the balloon during delivery to the site of the damage within the artery 15, the stent is tightly crimped onto the balloon. ... Other means for securing the stent onto the balloon may also be used, such as providing collars or ridges on the ends of the working portion, i.e., the cylindrical portion, of the balloon." (8/43-53)

The patent to **Knudson** discloses a stent then having struts 12 which define rectangular and octagonal open cells 14. Grooves 18 are formed on the outer surface of stent 10. A hollow guide wire 24 has a balloon 22 at its distal end. Guide wire 24 passes through a hollow catheter 30. Stent 10 is positioned over the distal end of catheter 30. An outer sheath 40 is located over catheter 30 and

had an enlarged outer end covering stent 10. Once in position with stent 10 aligned with an obstruction O, balloon 22 is expanded to fill the lumen distal of the obstruction. Openings 32 and 42 are formed in catheter 20 and sheath 40 to permit hydrogel 50 to be expelled through the openings to cover the obstruction. (Figure 4) Sheath 40 is then pulled proximally to permit stent 10 to expand as shown in figure 5. Doing so fractures hydrogel 50. (4/8-53) Vacuum is applied to draw the fractured hydrogel into lumen 34 of catheter 30. (Figure 6) Balloon 22 then retracted and pushes the stent 10 radially outwardly to cause further expansion of the stent into the hydrogel and the obstruction. Balloon 22 can then be deflated and the apparatus withdrawn. (4/54-5/6; figures 7-10)

### The Cited Art Distinguished

**Independent claim 1** has been amended to clarify that the engaging means is affixed at a position proximal of the whole radially expandable length of the balloon. In contrast, the **Limon** patent teaches securing the stent onto the balloon by either crimping it onto the balloon or by providing collars or ridges on the enlarged, cylindrical working portion of the balloon, that is on the expandable length of the balloon. There is nothing in Limon disclosing or suggesting positioning any affixing means proximal of the whole radially expandable length of the balloon. Rather, doing so would be contrary to the teachings of Limon because it would mean that the stent would no longer be carried on top of the balloon and thus would not be expandable by the balloon.

Claim 1 is also allowable over the **Knudson** patent because it fails to disclose the engaging means of claim 1. There is nothing "affixed to" the outer surface of catheter 30 which could be considered to be acting as the claimed engaging means. The outer surface of catheter 30 does not have anything affixed thereto, much less something that would engage the distal section of the vascular prosthesis to prevent axial translation of the vascular prosthesis as presently claimed. One of ordinary skill in the art would read this claim element as requiring something more than a simple polymer surface as is provided by catheter 30. Structure disclosed in this application corresponding to this means plus function element includes the following structures. First, a polymer layer that has been treated to enhance fictional engagement. There is nothing in Knudson suggesting that the outer surface of catheter 30 has any such enhanced friction surface. Second, raised features that interengage the distal section of the vascular prosthesis. While hydrogel 50 maybe considered to engage stent 10 of Knudson, one of ordinary skill in the art would not consider it affixed to the inner member (catheter 30), or anything else.

Accordingly, independent claim 1 is allowable over the cited art.

**Independent claim 11** recites the following element:

a non-radially expandable polymer layer affixed directly to the elongated member at a position proximal of the balloon, the polymer layer comprising means for engaging the distal section of the vascular prosthesis to enhance the grip of the polymer layer to the vascular prosthesis to help prevent axial translation of the vascular prosthesis during proximal retraction of the sheath.

Claim 11 is allowable over the **Knudson** patent because it fails to disclose a polymer layer "comprising means for engaging the distal section of the vascular prosthesis to enhance the grip of the polymer layer to the vascular prosthesis ... ." Claim 11 defines specific structure distinguishing over the prior art. Examples of the engaging means are described at ¶ 48, figure 5, treated polymer layer 87, and at ¶ 56, figure 8, features 147 comprising bumps or protuberances. This claim element requires something more than a simple polymer surface as is provided by catheter 30 of Knudson. There is nothing in Knudson suggesting that the outer surface of catheter 30 has any such engaging means.

According, independent claim 11 is allowable over the cited art.

The **dependent claims** are directed to specific novel subfeatures of the invention and are allowable for that reason as well as by depending from novel parent claims. For example, Limon fails to suggest a polymer layer treated to enhance frictional engagement as in **claim 2** or the raised features of **claim 4**. Knudsen fails to disclose or suggest that aspect of **claim 13** in which the polymer layer not only is treated to enhance the grip but also "defines raised features that interengage the distal section of the vascular prosthesis."

### **CONCLUSION**

It is respectfully submitted that this application is now in condition for allowance, and such action is requested.

If the Examiner believes a telephone conference would aid the prosecution of this case in any way, please call the undersigned at (650) 712-0340.

The Commissioner is hereby authorized to charge any fee determined to be due in connection with this communication, or credit any overpayment, to our Deposit Account No. 50-0869 (Client Ref. NOCO 1004-1).

Respectfully submitted,

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/JamesF. Hann/  
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